

## REMARKS

Withdrawn claims 10-18 have been cancelled solely to reduce filing fees. New claims 23-43 have been presented to more thoroughly define the subject matter applicants regard as their invention. Support for the limitations in the new claims can be found, *inter alia*, in the original claims as well as at page 3, line 10; page 5, line 6; page 6, line 20; page 7, line 29 and page 8, line 25 of the specification.

MPEP §2143.01V makes clear that *prima facie* obviousness can not be predicated on a proposed modification that makes the prior art technology unsuitable for its intended purpose. In this case, a fundamental feature of Meredith's sports surface material is that its individual polymer coated sand grain particles are unagglomerated. That is to say, Meredith's sports surface material is composed of a mass of essentially unagglomerated, essentially free-flowing discrete particles, since this physical state is necessary for this material to be useful as a sports surface. If Meredith's coated sand grains were not essentially unagglomerated and essentially free-flowing, they could not be brushed or raked to produce a layer of a desired, even thickness. *See*, col. 4, line 5. Nor could they be combined with a pile fabric, as described at col. 2, line 29 *et. seq.*

To achieve essentially unagglomerated, essentially free-flowing discrete particles, Meredith makes his sports surface material by combining a mass of individual sand grains with an aqueous emulsion of a synthetic rubber followed by heating the mixture with vigorous agitation. This causes water in the emulsion to be driven off and the individual polymer particles in the emulsion to adhere as a coating to the individual sand grains without sticking to one another. *See*, col. 3, lines 45-66.

The cited Valligney et al. published application describes a thermoplastic polyolefin powder composition which is capable of freely flowing over a hot mold and then solidifying thereon to form a coherent, elastic, flexible skin. *See*, Paragraphs [0051]-[0054]. In its most pertinent part, Paragraph [0068], this reference merely teaches that the ethylenic polymer component "a" of this thermoplastic polyolefin powder can have a melt flow index of 15-300, preferably 20-50, grams/10 minutes. There is, however, no suggestion in this reference that this ethylenic polymer could or should be combined with sand or other solid particulate in such a way

that separate, discrete coatings would be formed on the individual sand grains without causing the coated sand grains formed thereby to agglomerate with one another. Accordingly, it would not be *prima facie* obvious to replace the synthetic rubber polymer coating of Meredith with Valligney's thermoplastic polyolefin powder composition, because it would not be possible to produce an essentially unagglomerated, essentially free flowing particle mass if this were done.

Valligney et al. is clear that its thermoplastic polyolefin powder composition produces a coherent, solid mass (the polymer skin) when heated and then cooled. Therefore, replacing Meredith's coating system with Valligney's coating system would be expected to yield a solid mass of polymer and sand, not the unagglomerated, essentially free flowing discrete particles required by Meredith. And this is especially so, since neither Meredith nor Valligney et al. fairly suggest how Valligney's thermoplastic polyolefin powder coating could be applied to individual grains of sand or other particulate so as yield discrete polymer coated particles as opposed to an amalgamated, coherent polymer/particulate mass.

As indicated above, *prima facie* obviousness can not be predicated on a proposed modification that makes the prior art technology unsuitable for its intended purpose. Here, the single solid polymer/sand mass produced by replacing Meredith's synthetic rubber polymer coating with Valligney's thermoplastic polyolefin powder coating, as proposed in this rejection, would be unacceptable for Meredith's purpose of providing a brushable, rakeable, free flowing composition. That being the case, it is clear that this rejection is contrary to the PTO's own express guidelines on *prima facie* obviousness and hence is in error and should be withdrawn.

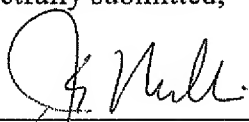
Finally, applicant notes that the cited references completely fail to suggest binding the thermoplastic polymer to the silica sand grain substrates by means of a coupling agent mixed with at least one of a phenolic, furan or melamine resin, as specified in new claims 25, 32 and 36. Nor do they suggest a loose, particulate material composed of multiple, discrete fractions, as specified in new claims 27, 34 and 38, or the agglomerate mass specified in new claim 40, or the mass of flocks specified in new claim 41 or the sports surfaces made from these products as specified in new claims 42 and 43.

Appln. SN 10/526,781  
Amendment of April 3, 2008  
Responsive to Office Action of October 3, 2007

If any additional fees are due, the U.S. Patent Office is hereby authorized to charge our  
Deposit Account No. 03-0172.

Respectfully submitted,

Date: April 3, 2008

  
\_\_\_\_\_  
John E. Miller (Reg. No. 26,206)  
(216) 622-8679